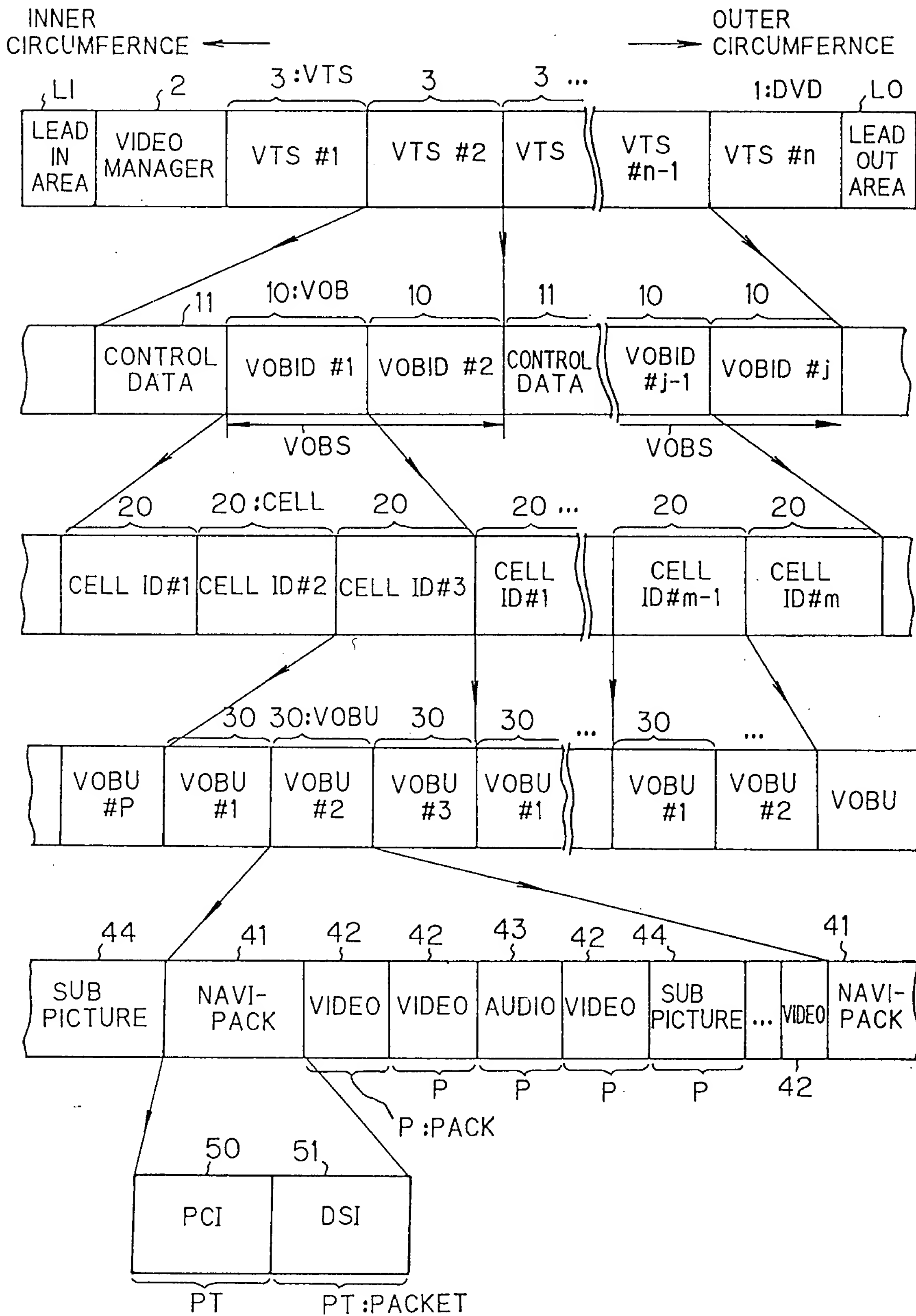


FIG. 1

PHYSICAL STRUCTURE OF RECORD INFORMATION
(PHYSICAL FORMAT)



U.S. Pat. No. 4,230,000

IN	DATE	FILE
TRAFFICMAN		

FIG. 2

FRAME PICTURES OF GOP

52 : GOP

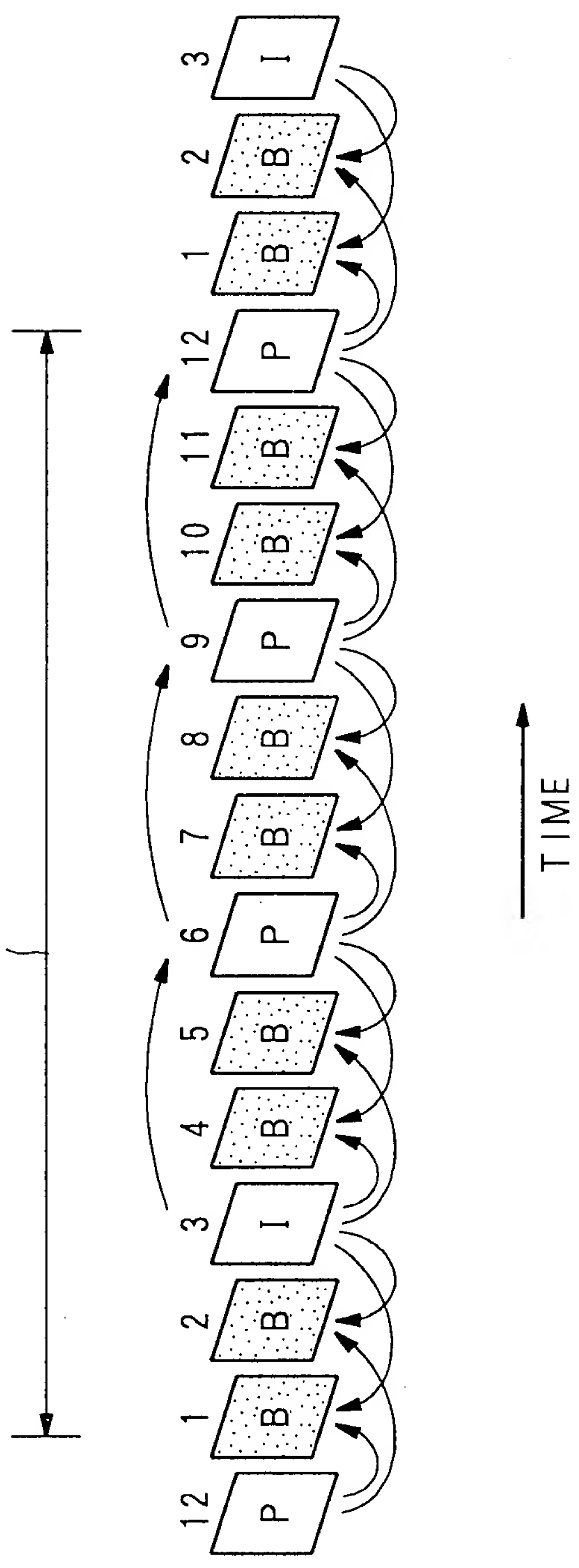


FIG. 3

LOGICAL STRUCTRE OF RECORD INFORMATION
(LOGICAL FORMAT)

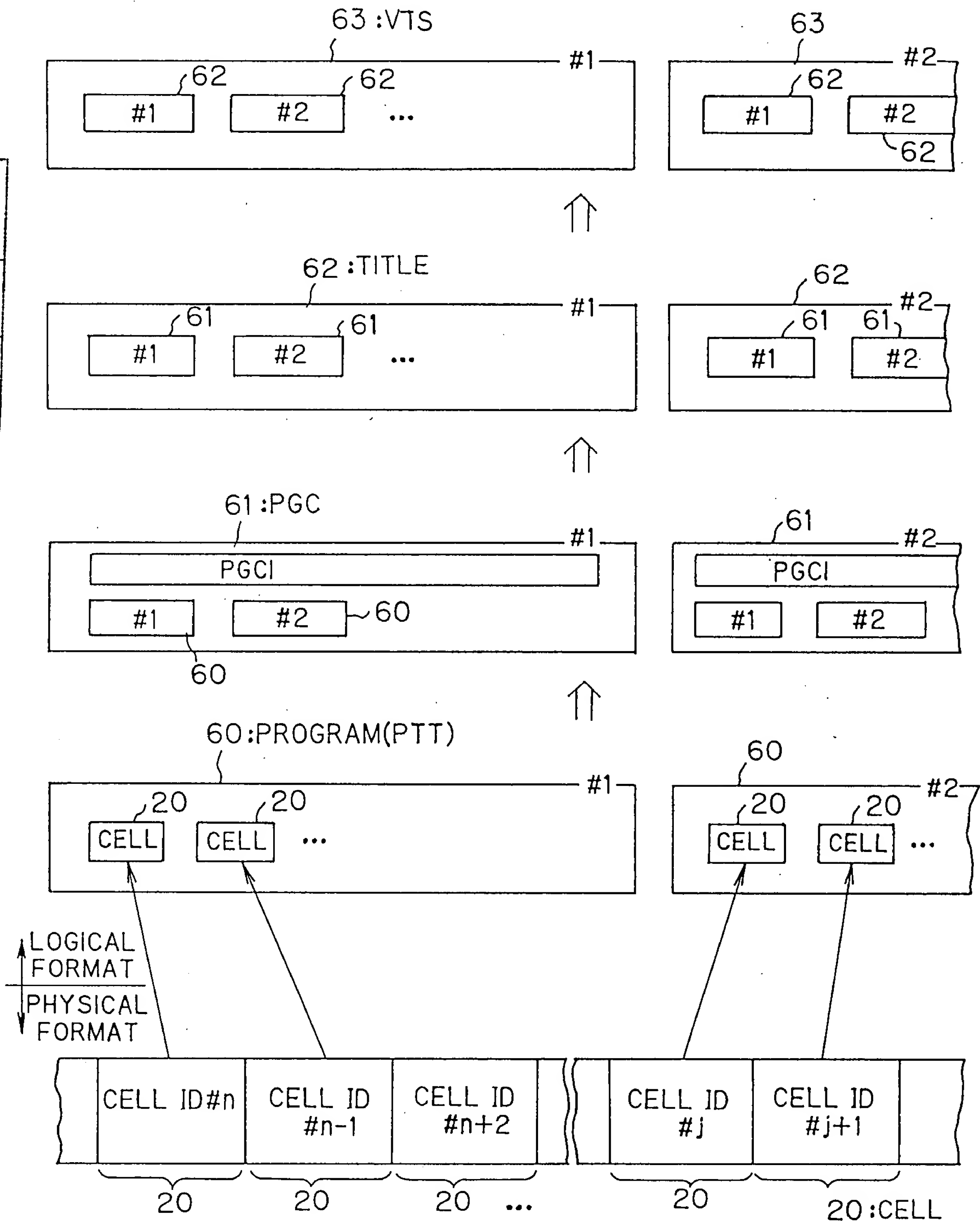
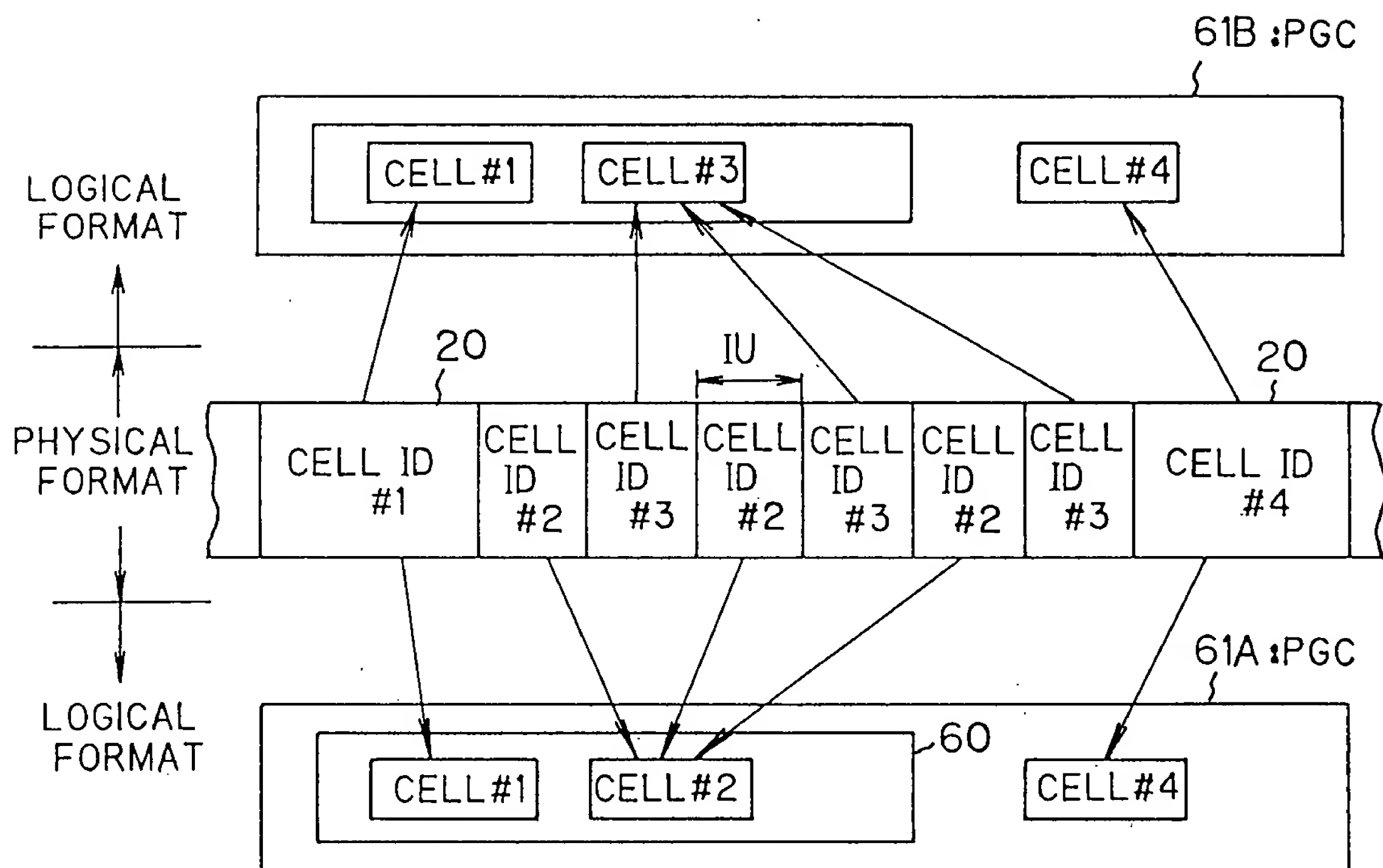


FIG. 4

STRUCTURE OF INTERLEAVED UNIT



IU : INTERLEAVED UNIT

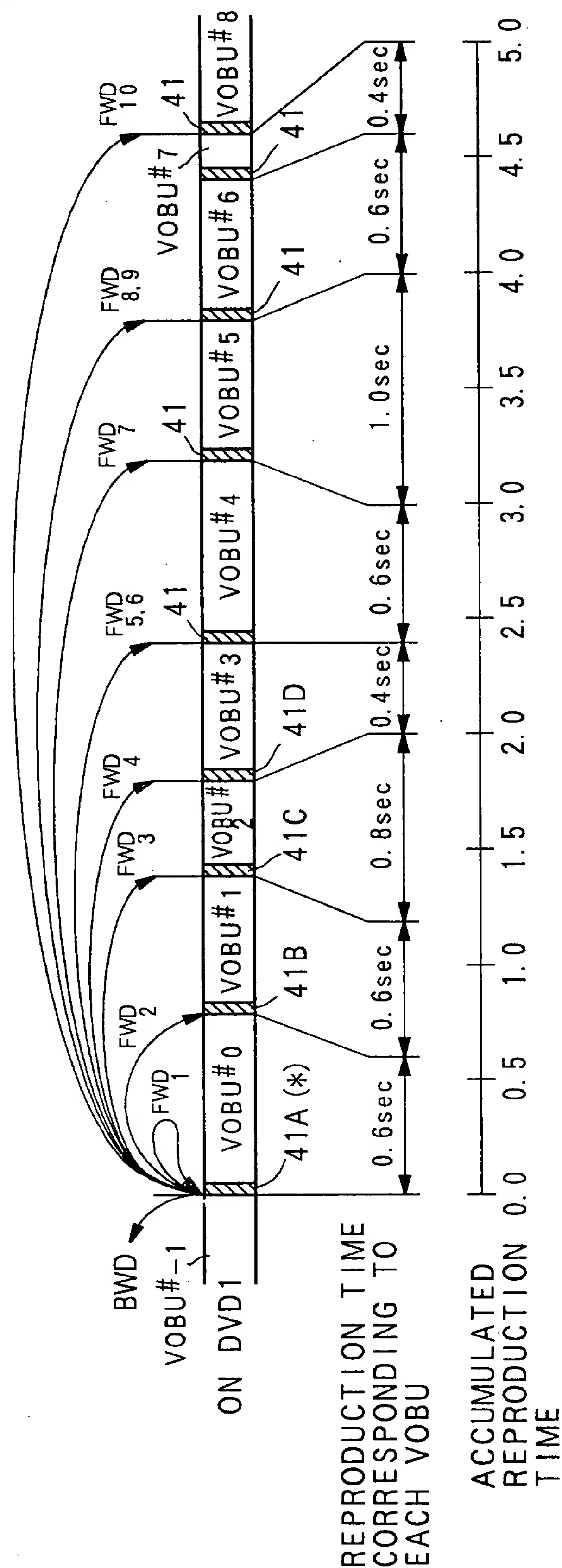
FIG. 5

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DSI DATA	
◦	GENERAL INFORMATION
◦	SEAMLESS INFORMATION
◦	ANGLE JUMP DESTINATION INFORMATION
◦	VOB UNIT SEARCH INFORMATION
◦	SYNCHRONOUS REPRODUCTION INFORMATION

DATE	10/10/1964	10/10/1964
TIME	10:10	10:10

VOBU SEARCH INFORMATION



41:NAVI-PACK

structure of VOBU search information

ADDRESS NUMBER	CONTENT
FWDA240	start address of VOBUs to be reproduced 120 seconds after
FWDA120	start address of VOBUs to be reproduced 60 seconds after
FWDA 60	start address of VOBUs to be reproduced 30 seconds after
FWDA 20	start address of VOBUs to be reproduced 10 seconds after
FWDA 15	start address of VOBUs to be reproduced 7.5 seconds after
FWDA 14	start address of VOBUs to be reproduced 7.0 seconds after
FWDA 13	start address of VOBUs to be reproduced 6.5 seconds after
FWDA 12	start address of VOBUs to be reproduced 6.0 seconds after
FWDA 11	start address of VOBUs to be reproduced 5.5 seconds after
FWDA 10	start address of VOBUs to be reproduced 5.0 seconds after
FWDA 9	start address of VOBUs to be reproduced 4.5 seconds after
FWDA 8	start address of VOBUs to be reproduced 4.0 seconds after
FWDA 7	start address of VOBUs to be reproduced 3.5 seconds after
FWDA 6	start address of VOBUs to be reproduced 3.0 seconds after
FWDA 5	start address of VOBUs to be reproduced 2.5 seconds after
FWDA 4	start address of VOBUs to be reproduced 2.0 seconds after
FWDA 3	start address of VOBUs to be reproduced 1.5 seconds after
FWDA 2	start address of VOBUs to be reproduced 1.0 second after
FWDA 1	start address of VOBUs to be reproduced 0.5 seconds after
BWDA 1	start address of VOBUs reproduced 0.5 seconds before
BWDA 2	start address of VOBUs reproduced 1.0 second before
BWDA 3	start address of VOBUs reproduced 1.5 seconds before
BWDA 4	start address of VOBUs reproduced 2.0 seconds before
BWDA 5	start address of VOBUs reproduced 2.5 seconds before
:	:
:	:
:	:

851

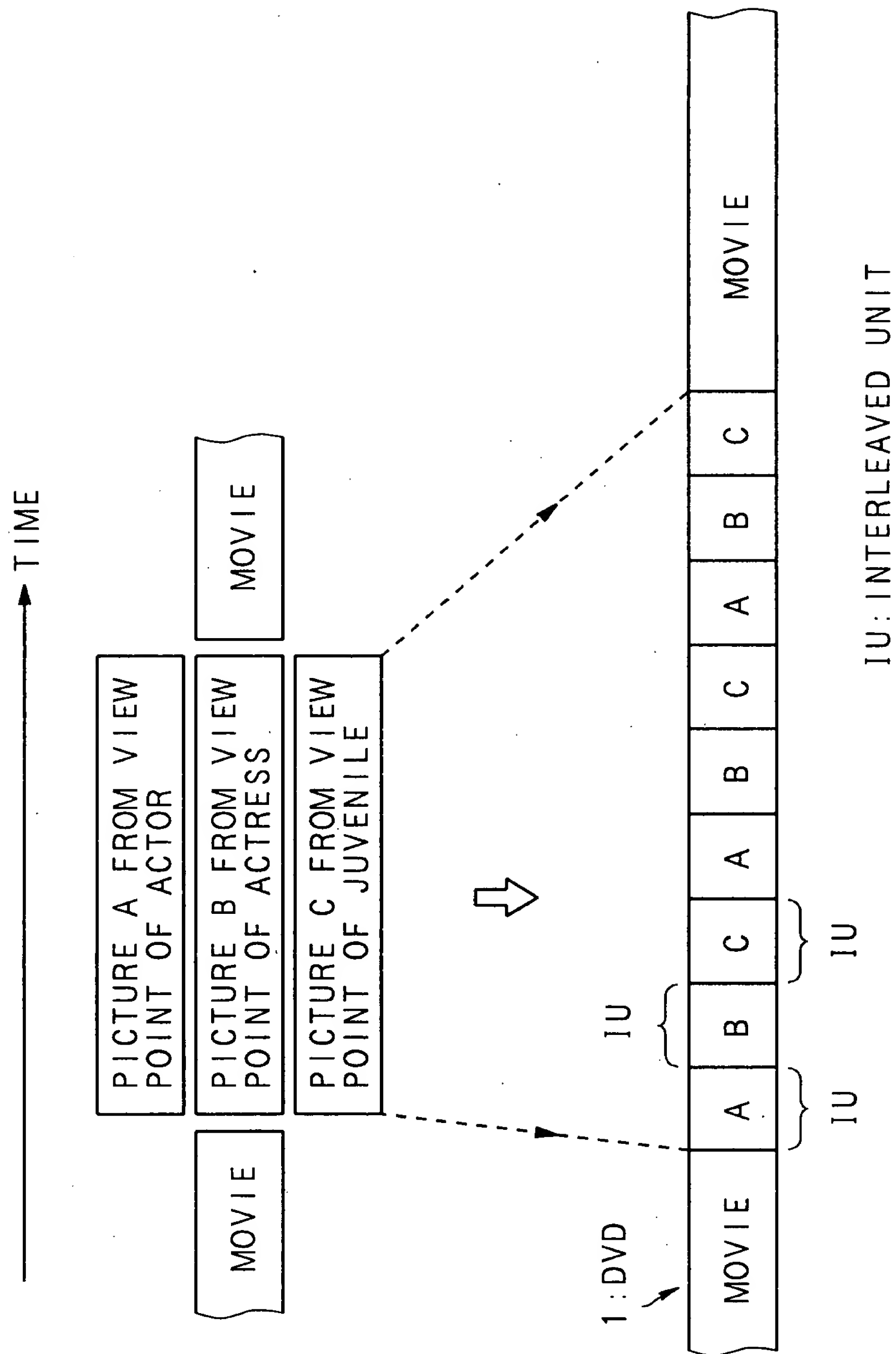


FIG. 9

RELATION BETWEEN REPRODUCTION TIME AND RECORD INFORMATION DIVIDED INTO INTERLEAVED UNITS

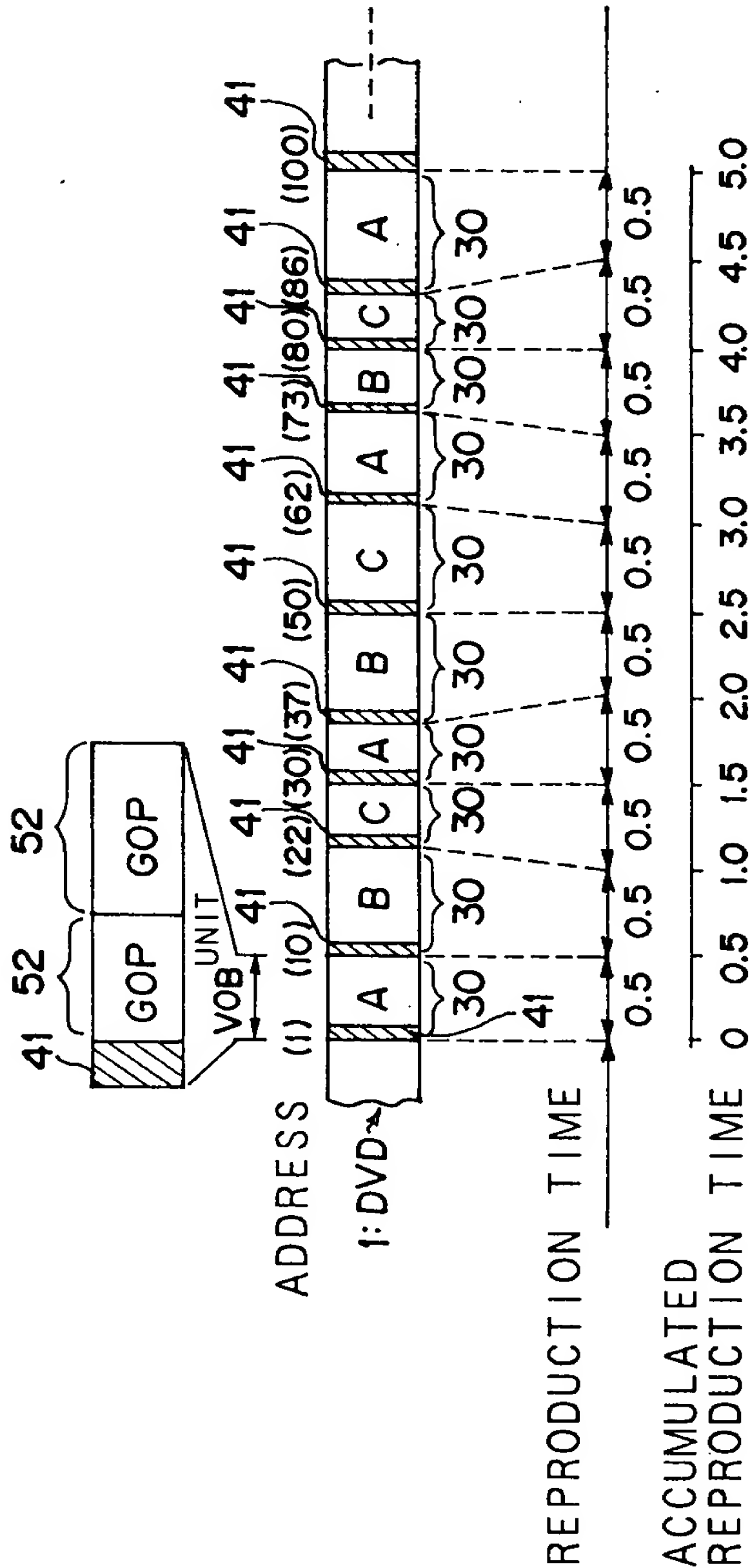


FIG. 10

VOBU search information

Example 1

ADDRESS NUMBER	CONTENT	VOBU ADDRESS
FWDA240	start address of VOB to be reproduced 120 seconds after	...
FWDA120	start address of VOB to be reproduced 60 seconds after	...
FWDA 60	start address of VOB to be reproduced 30 seconds after	...
FWDA 20	start address of VOB to be reproduced 10 seconds after	...
FWDA 15	start address of VOB to be reproduced 7.5 seconds after	...
FWDA 14	start address of VOB to be reproduced 7.0 seconds after	...
FWDA 13	start address of VOB to be reproduced 6.5 seconds after	...
FWDA 12	start address of VOB to be reproduced 6.0 seconds after	...
FWDA 11	start address of VOB to be reproduced 5.5 seconds after	...
FWDA 10	start address of VOB to be reproduced 5.0 seconds after	100
FWDA 9	start address of VOB to be reproduced 4.5 seconds after	86
FWDA 8	start address of VOB to be reproduced 4.0 seconds after	80
FWDA 7	start address of VOB to be reproduced 3.5 seconds after	73
FWDA 6	start address of VOB to be reproduced 3.0 seconds after	62
FWDA 5	start address of VOB to be reproduced 2.5 seconds after	50
FWDA 4	start address of VOB to be reproduced 2.0 seconds after	37
FWDA 3	start address of VOB to be reproduced 1.5 seconds after	30
FWDA 2	start address of VOB to be reproduced 1.0 second after	22
FWDA 1	start address of VOB to be reproduced 0.5 seconds after	10
BWDA 1	start address of VOB reproduced 0.5 seconds before	...
BWDA 2	start address of VOB reproduced 1.0 second before	...
BWDA 3	start address of VOB reproduced 1.5 seconds before	...
BWDA 4	start address of VOB reproduced 2.0 seconds before	...
BWDA 5	start address of VOB reproduced 2.5 seconds before	...
:	:	:
:	:	:
:	:	:

FIG. 12

VOBU search information

Example 2

ADDRESS NUMBER	CONTENT	VOBU ADDRESS
FWDA240	start address of VOB to be reproduced 120 seconds after	...
FWDA120	start address of VOB to be reproduced 60 seconds after	...
FWDA 60	start address of VOB to be reproduced 30 seconds after	...
FWDA 20	start address of VOB to be reproduced 10 seconds after	...
FWDA 15	start address of VOB to be reproduced 7.5 seconds after	...
FWDA 14	start address of VOB to be reproduced 7.0 seconds after	...
FWDA 13	start address of VOB to be reproduced 6.5 seconds after	...
FWDA 12	start address of VOB to be reproduced 6.0 seconds after	...
FWDA 11	start address of VOB to be reproduced 5.5 seconds after	...
FWDA 10	start address of VOB to be reproduced 5.0 seconds after	...
FWDA 9	start address of VOB to be reproduced 4.5 seconds after	...
FWDA 8	start address of VOB to be reproduced 4.0 seconds after	...
FWDA 7	start address of VOB to be reproduced 3.5 seconds after	...
FWDA 6	start address of VOB to be reproduced 3.0 seconds after	...
FWDA 5	start address of VOB to be reproduced 2.5 seconds after	...
FWDA 4	start address of VOB to be reproduced 2.0 seconds after	...
FWDA 3	start address of VOB to be reproduced 1.5 seconds after	86
FWDA 2	start address of VOB to be reproduced 1.0 second after	62
FWDA 1	start address of VOB to be reproduced 0.5 seconds after	30
BWDA 1	start address of VOB reproduced 0.5 seconds before	...
BWDA 2	start address of VOB reproduced 1.0 second before	...
BWDA 3	start address of VOB reproduced 1.5 seconds before	...
BWDA 4	start address of VOB reproduced 2.0 seconds before	...
BWDA 5	start address of VOB reproduced 2.5 seconds before	...
:	:	:
:	:	:
:	:	:

551

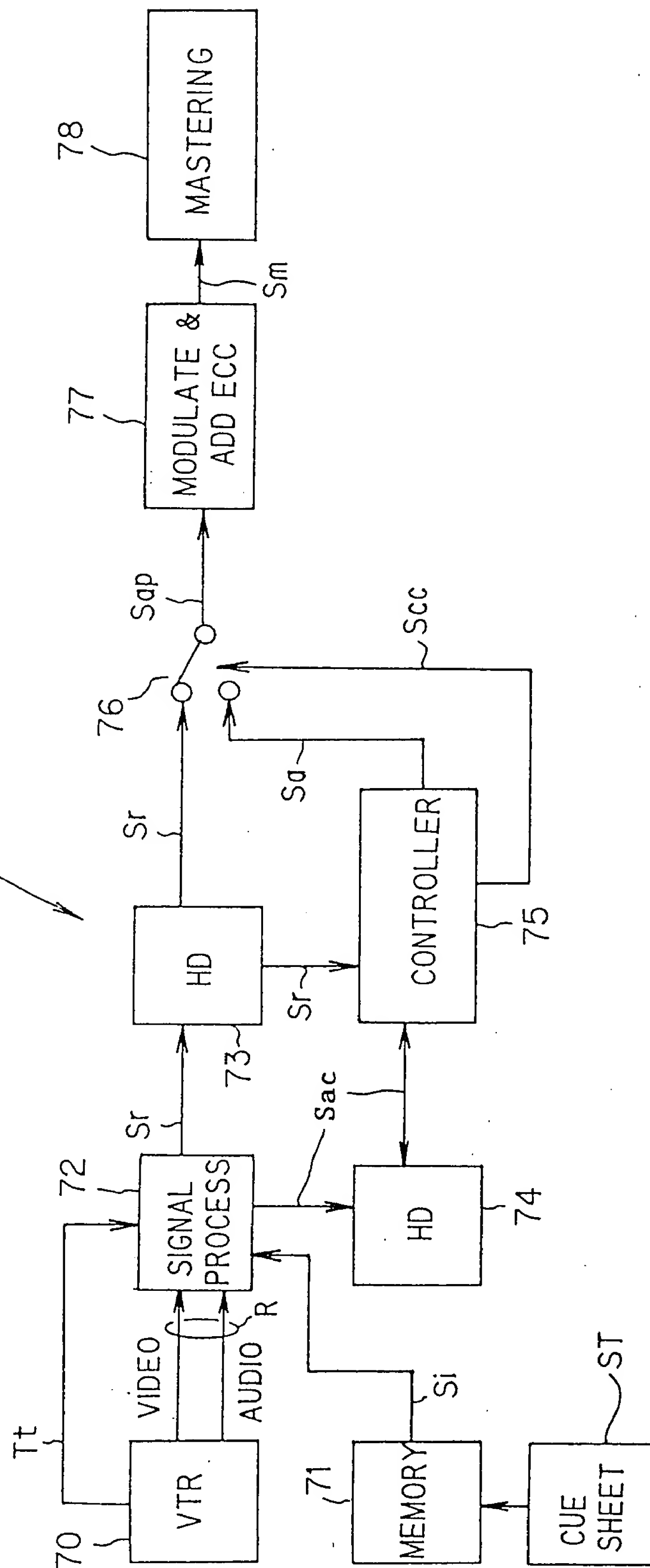


FIG. 14

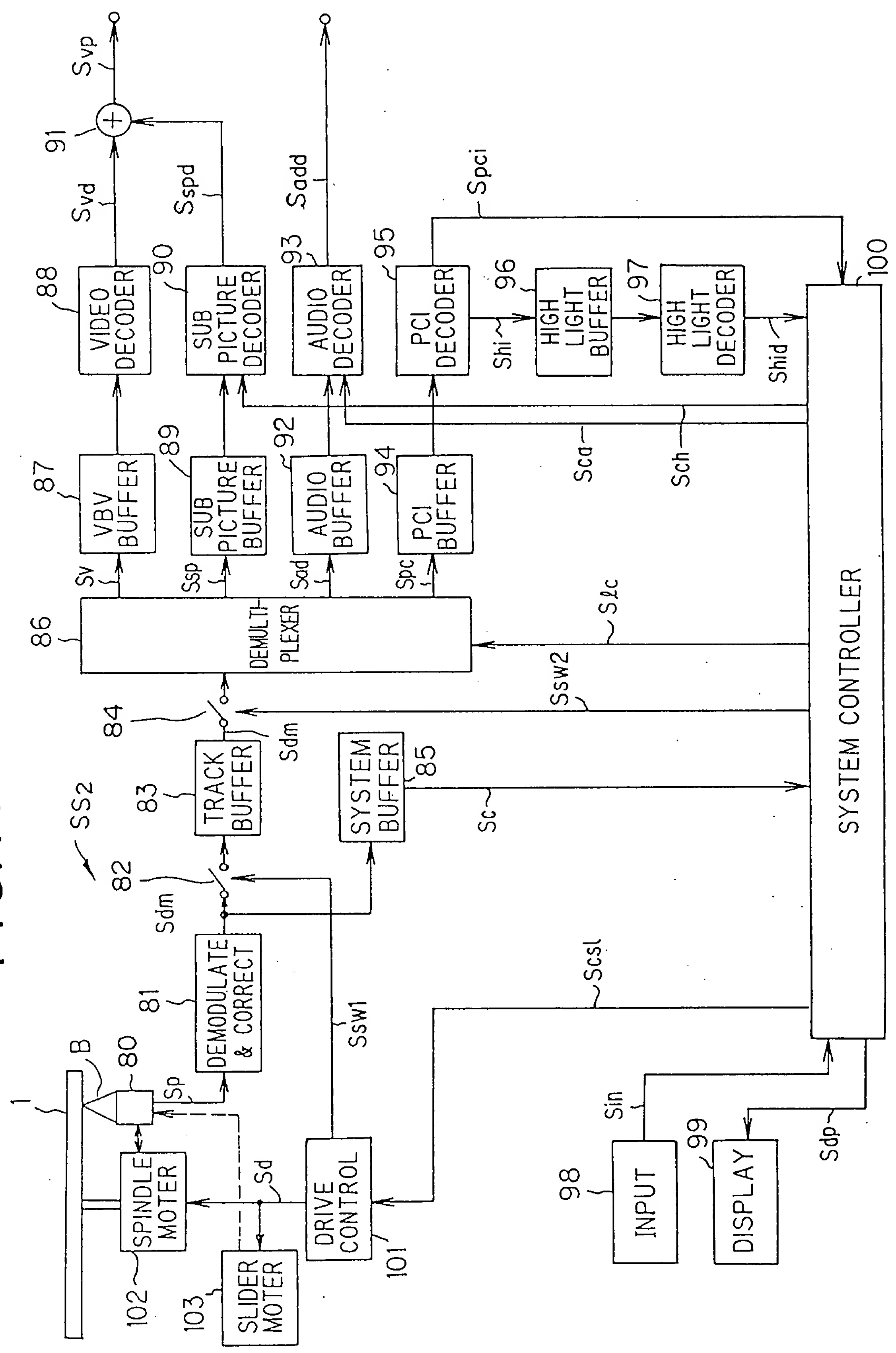


FIG. 14

FIG. 15

J TIMES SPEED VISUAL SCAN OPERATION

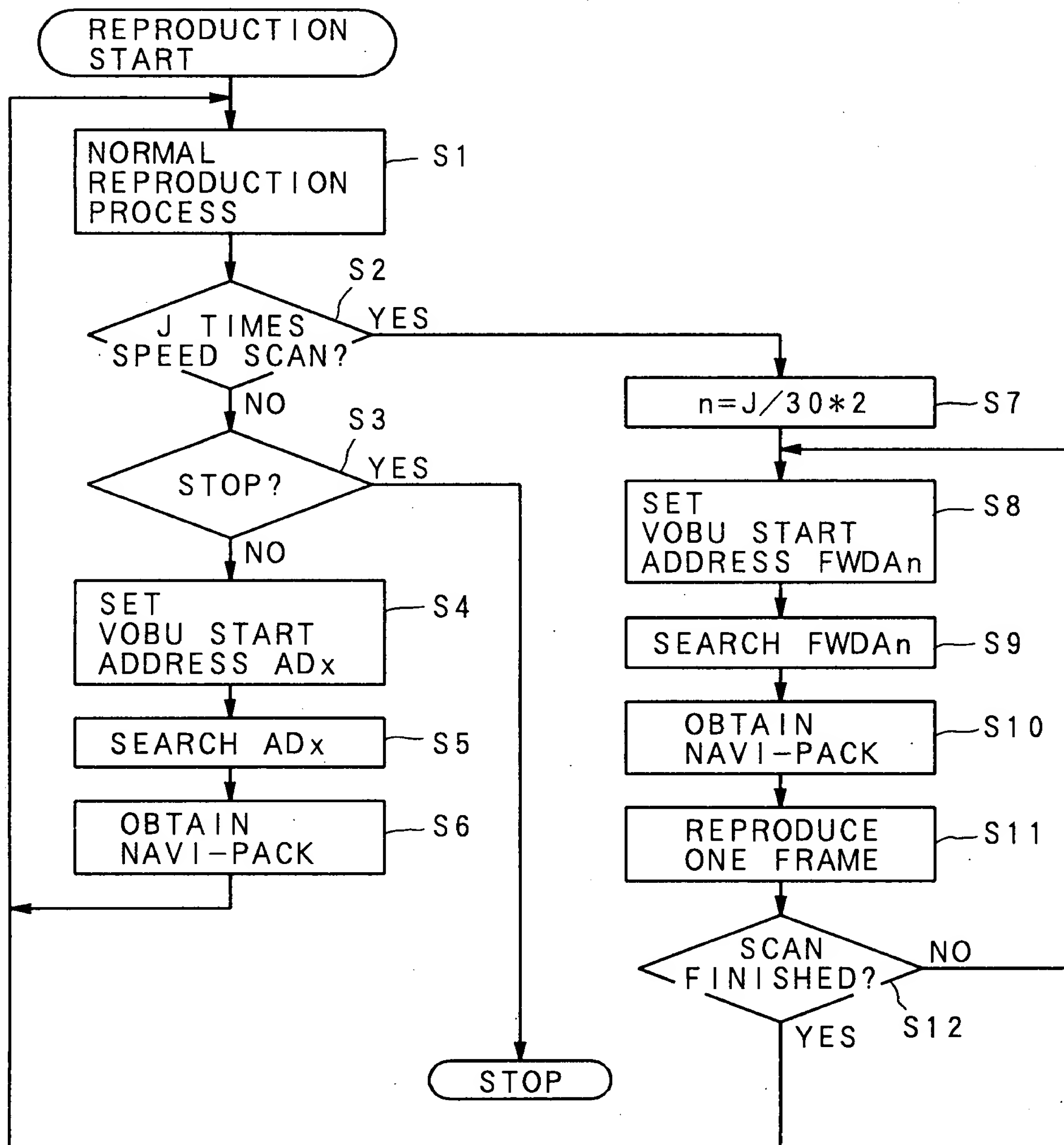


FIG. 16

TIME SEARCH

